

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MISSOURI  
EASTERN DIVISION

DOUGLAS M. FARRAGO, )  
                          )  
                          )  
Plaintiff,            )  
                          )  
                          )  
vs.                    )                            No. 4:06-CV-958 (CEJ)  
                          )  
                          )  
RAWLINGS SPORTING GOODS )  
COMPANY, INC.,        )  
                          )  
                          )  
Defendant.            )

**MEMORANDUM**

This matter is before the Court on the parties' joint motion for claim construction. On March 19, 2007, a hearing on the motion was held, pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996). At issue is the parties' dispute over the scope of claim 12 in U.S. Patent No. 5,073,986 (the '986 patent).

**I. Background**

Plaintiff is the inventor of the '986 patent, which is titled "Pad Structure for Relieving Knee Stress." The pad structure is marketed under the name "Knee Saver." Baseball catchers, weight lifters, and others who frequently kneel and squat are among the pad structure's potential users. The pad structure under the '986 patent consists of a flexible enclosure or cover which is filled with a flexible, resilient material and which can be attached to the leg of the wearer. Defendant markets a product called the "Knee Reliever" that contains internal padding that is flexible and resilient and that may be secured by straps to the user's leg.

Plaintiff claims that defendant's Knee Reliever product infringes the '986 patent.

Claim 12 of the '986 patent reads (with disputed terms underlined):

A pad structure for relieving stress to a person's knee caused by the person squatting or kneeling, comprising:

a generally polyhedron shaped flexible enclosure having major and minor longitudinal axes, the cross-sectional configuration of the enclosure along its major longitudinal axis being substantially quadrilaterally shaped, having four periphery surfaces, the cross-sectional configuration of the enclosure along its minor longitudinal axis being substantially rectangular shaped, a first periphery surface adapted to be disposed adjacent the back of the upper leg of the person, a second periphery surface adapted to be disposed adjacent the back of the lower leg of the person, a third periphery surface adapted to be disposed adjacent and spaced from the back of the knee of the person and a fourth periphery surface is disposed opposite the third periphery surface; all of the periphery surfaces being disposed between the back of the upper leg and the back of the lower leg with no portion of the flexible enclosure being disposed upon the front of the lower leg;

the flexible enclosure being substantially filled with a flexible, resilient material; and

means for releasably securing the flexible enclosure to the person's leg, whereby the flexible enclosure is disposed behind the person's knee and in contact with the back of the person's upper and lower leg.

Resolution of the disputed claim depends upon the construction of the phrases (1) "generally polyhedron shaped," (2) "substantially quadrilaterally shaped," (3) "having four periphery surfaces," (4) "a third periphery surface adapted to be disposed adjacent and spaced from the back of the knee of the person," and

(5) "means for releasably securing the flexible enclosure to the person's leg."

## **II. Discussion**

The construction of a patent claim is a matter of law exclusively for the court. Markman v. Westview Instruments, Inc., 52 F.3d 967, 977 (Fed. Cir. 1995). The words of claims, "both asserted and nonasserted," are the first resource for determining the scope of a patent alleged to be infringed. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582-83 (Fed. Cir. 1996); Markman, 52 F.3d at 976. When interpreting a claim, words are given their "ordinary and customary meaning," which is "the meaning that the term would have to a person of ordinary skill in the art" relevant to the claim. Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (citations omitted).

If the ordinary meaning of claim language may be "readily apparent" to a layperson, then claim construction "involves little more than the application of the widely accepted meaning of commonly understood words," and general purpose dictionaries may be consulted. Phillips, 415 F.3d at 1314. Claims must be read in light of the specification, and the court also may consider the prosecution history. Vitronics, 90 F.3d at 1582 (citations omitted). If these intrinsic sources resolve ambiguity regarding disputed claim terms, the court may not refer to extrinsic evidence. Id. at 1583.

"[A]n inventor may use the specification to intentionally disclaim or disavow the broad scope of a claim," but "this

intention must be clear . . . and [the court] cannot draw limitations into the claim from a preferred embodiment." Conoco, Inc. v. Energy & Environmental Intern, L.C., 460 F.3d 1349, 1357-58 (Fed. Cir. 2006) (citations omitted).

The Federal Circuit explains disclaimers as follows:

When the specification "makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question."

Microsoft Corp. v. Multi-Tech Systems, Inc., 357 F.3d 1340, 1347 (Fed. Cir. 2004), quoting SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001).

Additionally, the "doctrine of prosecution disclaimer . . . preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution." Hakim v. Cannon Avent Group, PLC, 479 F.3d 1313, 1317-18 (Fed. Cir. 2007) (citations omitted).

When a court construes the claims of the patent, "it is as if the construction fixed by the court had been incorporated in the specification." Markman, 52 F.3d at 978 (citation omitted).

#### **A. "Generally polyhedron shaped"**

Plaintiff argues that the claim term "generally polyhedron shaped" requires only that the enclosure be substantially or approximately polyhedron shaped. Plaintiff asserts that the phrase should be interpreted with reference to the enclosure in an empty

state, rather than in a filled state. The enclosure is meant to be filled with flexible material, plaintiff argues, and the use of the term "generally" contemplates that the enclosure's shape is malleable and will change as it is used. Thus, the polyhedron's faces need not be straight, but can be curved.

Plaintiff refers the Court to the '986 patent specification, which describes the flexible enclosure as having "a general polyhedron shape formed by the substantially planar surfaces 47-52." Patent, col. 3, lines 56-57. The specification also explains that the material utilized within the enclosure must be able to "withstand repeated cycles of compression . . . and expansion of the pad structure." Patent, col. 4, lines 6-16. Finally, plaintiff notes that the prosecution history refers to a device patented by Mengshoel that the patent examiner described as "of a generally polyhedron shape [although it] is not an exact polyhedron due to it's [sic] curved shape." Pros. History, page 2, para. 3. Plaintiff claims that the Mengshoel reference shows that the patent examiner recognized that a polyhedron could encompass curved regions, as long as the overall shape is still a polyhedron.

Defendant argues that the shape of the enclosure must be determined when the enclosure is filled, not empty. Defendant argues that a polyhedron by definition has straight sides and flat faces and claims that the word "generally" was intended only to provide for slight deviation from a mathematically perfect polyhedron and cannot be used to "entirely vitiate" the meaning of "polyhedron shaped." Joint Memorandum regarding Claim Construction

at 6-7. Defendant asserts that the Mengshoel reference indicates how the patent examiner viewed a polyhedron, but not what the patentee understood the term to mean.

The claim language refers to "a generally polyhedron shaped enclosure," and describes the properties of that enclosure, including the following: "the flexible enclosure being substantially filled with a flexible, resilient material." Patent, claim 12, col. 8, lines 9, 29-30.

Claims "must be read in view of the specification, of which they are a part." Vitronics, 90 F.3d at 1582 (citations omitted). The specification, like claim 12, refers to a "flexible enclosure" which is "substantially filled, and preferably completely filled, with a flexible, resilient material." Patent, col. 3, lines 59-60. The specification also states that the pad material "exerts a force which separates upper and lower legs . . . and thus relieves stress upon knee." Patent, col. 3, lines 62-64. An empty enclosure could not perform this function. It is "entirely proper to consider the functions of an invention in seeking to determine the meaning of particular claim language." Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1318 (Fed. Cir. 2005), citing Renishaw PLC v. Marposs Societa per Azioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998).

The Court finds that the claim's references to the enclosure contemplate the enclosure in a substantially filled state, not in an empty state. The intended function described in the specification supports this conclusion. Accordingly, the Court will

interpret the language of claim 12 with reference to the enclosure in a filled state, rather than an empty one.

The claim's language, specification, and prosecution history do not make clear the definition of polyhedron. Accordingly, the Court will consult a dictionary to determine the ordinary and customary meaning of "polyhedron." A polyhedron is "a solid formed by plane faces." Webster's Ninth New Collegiate Dictionary (1983). A plane is defined as "a: a surface of such nature that a straight line joining two of its points lies wholly in the surface; b: a flat or level surface." Id. A polyhedron thus by definition must contain plane faces - that is, flat or level faces. "Generally" and "substantially" are words of approximation, "descriptive terms" used to "avoid a strict numerical boundary to the specified parameter." Anchor Wall Systems, Inc. v. Rockwood Retaining Walls, Inc., 340 F.3d 1298, 1310-11 (Fed. Cir. 2003), quoting Ecolab, Inc. v. Envirochem, Inc., 264 F.3d 1358, 1367 (Fed. Cir. 2001).

The Court finds that a "generally polyhedron shaped enclosure" means that the overall shape of the enclosure, when in a substantially filled state, must be that of a polyhedron, and the faces of the polyhedron need not be strictly or perfectly flat or planar, but must be generally flat or planar.

#### **B. "Substantially quadrilaterally shaped"**

Plaintiff argues that the claim language "the enclosure along its major longitudinal axis being substantially quadrilaterally shaped" requires only that the sides of the pad cover "have an

approximate four-sided shape – not necessarily a perfect four-sided shape – and/or a sum of internal angles of about 360 degrees.” Plaintiff’s Opening Claim Construction Brief at 10. Defendant argues that the term “substantially” allows some deviation from an exact mathematical quadrilateral, but cannot eliminate the requirement that the overall shape of the pad’s sides still must be a quadrilateral.

The claim language, specification, and prosecution history do not make clear the meaning of “quadrilateral,” and the Court will consult a dictionary and other extrinsic evidence to determine the term’s ordinary and customary meaning. “Quadrilateral” is defined as “a plane figure having four sides and four angles.” Random House College Dictionary (1973). The parties note that basic principles of geometry hold that the sum of the interior angles of a quadrilateral must equal 360 degrees. See Exhibit E. Thus, if the sum of the interior angles of a polygon is not 360 degrees, the shape is not a quadrilateral.<sup>1</sup> By definition, a quadrilateral has four planar sides, meaning that the sides are flat or level and are bounded by four straight lines.

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<sup>1</sup> A polygon is “a figure, esp. a closed plane figure, having three or more usually straight sides.” Random House College Dictionary (1973). According to geometric principles, if the sum of the interior angles of a polygon is 180 degrees, the shape is a three-sided polygon (a triangle), which has three sides; if the sum of the interior angles is 360 degrees, the shape is a four-sided polygon (a quadrilateral); if the sum of the interior angles is 540 degrees, the shape is a five-sided polygon (a pentagon). See Exhibit E; Random House College Dictionary (1973).

For the reasons explained in the preceding section, the construction of claim terms relating to the pad structure's enclosure is with reference to the enclosure in a substantially filled state. The Court finds that the phrase "substantially quadrilaterally shaped" means that the enclosure along its major longitudinal axis has an overall quadrilateral shape with four sides which are overall flat or level and are composed of overall straight lines, and the shape's internal angles reach the sum of approximately 360 degrees.

**C. "Having four periphery surfaces"**

As discussed above, plaintiff argues that the enclosure's faces can be slightly curved, and the enclosure's sides can be substantially quadrilaterally shaped. The periphery surfaces define the substantially quadrilaterally shaped sides of the enclosure, and, plaintiff argues, it follows that the periphery surfaces can have some curvature. Plaintiff argues that the periphery surfaces need not meet at straight-edged corners or corners with any particular angle. Defendant argues that the phrase "four periphery surfaces" requires four distinct surfaces intersecting at angled corners. Defendant explains that there must be four distinct periphery surfaces, because the periphery surfaces define the substantially quadrilaterally shaped sides of the pad.

As explained above, the construction of claim terms relating to the pad's enclosure is with reference to the enclosure in a substantially filled state. The claim language, specification, and

prosecution history do not reveal the ordinary and customary meaning of "periphery" and "surface," and the Court will consult a dictionary. Periphery is defined as: "the external boundary of any surface or area." Random House College Dictionary (1973). Surface is defined as "1. the outer face, outside, or exterior boundary of a thing. . . . 5. *Geom.*: any figure having only two dimensions; part or all of the boundary of a solid." Id.

The claim reads, "having four periphery surfaces." Absent from the phrase are any words of approximation or generality. The claim's language does not refer to any corners. A solid having four periphery surfaces necessarily must have four areas where the surfaces meet and their planes intersect, but the claim does not require these areas to be angled corners. The drawings of the pad structure in the specification depict the four periphery surfaces intersecting at sharp, angled corners. However, "the mere fact that the patent drawings depict a particular embodiment of the patent does not operate to limit the claims to that specific configuration." Anchor Wall, 340 F.3d at 1306-7. The Court finds that the claim term "having four periphery surfaces" means that the pad structure has four periphery surfaces which meet, but not necessarily at corners; if the surfaces do meet at corners, the corners need not have any particular angle.

Defendant alleges that the plaintiff disclaimed a pad structure having less than four periphery surfaces. During prosecution, plaintiff amended the claim by changing the language

"at least three" periphery surfaces to "four periphery surfaces." As defendant notes, "where the patentee has unequivocally disavowed a certain meaning to obtain his patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender." Liquid Dynamics Corp. v. Vaughan Co., Inc., 355 F.3d 1361, 1368 (Fed. Cir. 2004) (citation omitted). The Court finds that the plaintiff disclaimed a pad structure with at least three periphery surfaces.

**D. "A third periphery surface adapted to be disposed adjacent and spaced from the back of the knee of the person"**

The parties agree that the third periphery surface need not touch the back of the knee; they differ as to the shape and orientation of that surface. Plaintiff argues that the phrase requires only that the third periphery surface face, but need not touch, the back of the knee. Plaintiff suggests that the third periphery surface can be curved and need not be perpendicular to the pad's major longitudinal axis. Defendant argues that the phrase means that the third periphery surface faces the back of the knee, is perpendicular to the major longitudinal axis of the pad, and is "truncated" and does not include an apex or point touching the back of the knee.

The original patent application claim 13 (later amended to become what is now claim 12) did not include reference to a third or fourth periphery surface. See Prosecution History, Application at 20. In response to the examiner's comments and rejections, the

plaintiff amended the claim to add the language describing the third and fourth periphery surfaces.

The claim language, specification, and prosecution history do not reveal the ordinary and customary meaning of "adjacent," and the Court will consult a dictionary. The dictionary definition of "adjacent" is: "1. near or close; next or contiguous . . . 2. *Geom.* (of two angles) having a common vertex and one common side." Random House College Dictionary (1973). Thus, the plain language of the claim, "disposed adjacent and spaced from the back of the knee," is silent as to the orientation of the third periphery surface and the measure of the angle at which it intersects the major longitudinal axis.

In the specification, plaintiff's drawings appear to depict the third periphery surface as perpendicular to the major longitudinal axis. The specification discusses angle 72, which is the angle where the third periphery surface (facing the knee) and the second periphery surface (facing the lower leg) meet: "Preferably, angle 72 is a right angle . . . in order to increase the amount of volume of flexible enclosure containing flexible, resilient material acting upon the back of the upper leg." Patent, col. 5, lines 37-40; Patent Figs. 1, 2 (internal references to illustration legends omitted). As the specification's choice of words makes clear, this configuration is a preferred embodiment, and as such, cannot be used to limit the claim. Anchor Wall, 340 F.3d at 1306-7. Further, "when a claim term is expressed in general

descriptive words," the court "will not ordinarily limit the term to a numerical range that may appear in the written description or in other claims." Id. at 1358, quoting Renishaw PLC v. Marposs Societa per Azioni, 158 F.3d 1243, 1249 (Fed. Cir. 1998) (other citations omitted).

The specification also describes a configuration wherein both the third and fourth periphery surfaces "are disposed substantially perpendicular to first periphery surface," which faces the upper leg. Patent, col. 5, lines 35-36; Patent Figs. 1, 2. This description is also a preferred embodiment which cannot operate to limit a claim. Anchor Wall, 340 F.3d at 1306-7.

The third periphery surface is one of the four periphery surfaces that define the substantially quadrilaterally shaped sides of the pad structure. As discussed above, that quadrilateral must have internal angles of approximately 360 degrees, and the sides of the quadrilateral must be straight overall. No requirement that the third periphery surface must be perpendicular to the major longitudinal axis inheres in the definition of a quadrilateral.

The Court finds that claim 12 allows the third periphery surface to be perpendicular, but does not require it to be perpendicular.

Defendant argues that the phrase "spaced from the back of the knee" shows that plaintiff specifically disclaimed a pad structure wherein the third periphery surface forms an apex. Defendant argues that if the third periphery surface extended to an apex, it would

no longer be spaced from the back of the knee. Defendant notes that plaintiff's preferred embodiment describes and illustrates the third periphery surface as truncated. Patent Fig. 3; Patent, col. 5, lines 40-49.

Two of the three illustrations in the specification depict the pad structure with a truncated third periphery surface. See Patent Figs. 1, 3. The specification explains:

Although pad structure could be formed having a configuration of each side face surface in the shape of a triangle, as illustrated in FIG. 2, it has been determined that pad structure is more comfortable for the wearer of pad structure if the tip of flexible enclosure is removed, or truncated, whereby the third periphery surface is formed by the removal of portion of the flexible enclosure to leave flexible enclosure in the configuration illustrated in FIGS. 1 and 3.

Patent, col. 5, lines 40-49 (internal references to illustration legend omitted). The Court finds that this language merely expresses a preferred embodiment of the pad structure, but does not in itself operate to limit the claim, which does not describe the third periphery surface as truncated.

The Court also notes that the patent's third illustration, Fig. 2, depicts the pad structure in the shape of a triangle with an apex facing the back of the knee. The depiction of the pad structure in the overall shape of a triangle appears to contradict the claim's requirements of four periphery surfaces and two substantially quadrilaterally shaped sides. The claim's language, however, does not preclude an enclosure in the overall shape of a triangle with the surface of the tip truncated very slightly,

resulting in a very narrow third periphery surface. The requirements of four periphery surfaces and two quadrilaterally shaped sides, however, do preclude a pad enclosure shaped like a true triangle with the third periphery surface being a true apex. Whether the third periphery surface of a particular pad enclosure is narrow enough to constitute the apex of a triangle is a question of fact.

The Court construes the claim language to allow, but not require, the third periphery surface to be perpendicular to the major longitudinal axis. The claim language precludes a pad enclosure in the shape of a true triangle with an apex facing the back of the knee, but allows for a pad enclosure with two substantially quadrilaterally shaped sides and four periphery surfaces, where the third periphery surface is very narrow. Finally, the pad enclosure need not touch the knee, as the parties agree.

**E. "Means for releasably securing the flexible enclosure to the person's leg"**

The parties agree that the claim language, "means for releasably securing the flexible enclosure to the person's leg" states a means-plus-function claim to be construed under 35 U.S.C. § 112, ¶ 6. The parties also agree that the structures designated to perform this function are straps (a single strap or three straps). The parties differ as to the origination of the straps. Plaintiff claims the straps can originate either from the pad enclosure itself or from a separate shin guard. Defendant argues

that the straps can originate only from the enclosure, and the specification's reference to straps originating from a shin guard is an alternative structure and an alternative function, neither of which is covered by the patent.

Section 112 of the Patent Act provides for means-plus-function claims in patents:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification or equivalents thereof.

35 U.S.C. § 112, para. 6.

A court construing a means-plus-function claim "must first define the particular function claimed," and then must "identify 'the corresponding structure, material, or acts described in the specification.'" Budde v. Harley-Davidson, Inc., 250 F.3d 1369, 1376 (Fed. Cir. 2001), citing 35 U.S.C. § 112, ¶ 6; Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1428 (Fed. Cir. 1996). The purpose of the inquiry is to determine whether "the specification adequately sets forth structure corresponding to the claimed function" from the viewpoint of one skilled in the art. Id.

The corresponding structure includes "any alternative structures identified" that "perform the recited function." Ishida Co., Ltd. v. Taylor, 221 F.3d 1310, 1316 (Fed. Cir. 2000), citing Serrano v. Telular Corp., 111 F.3d 1578, 1583 (Fed. Cir. 1997). The Court is not required "to formulate a single claim interpretation

to cover multiple embodiments. Rather, § 112, ¶ 6 requires only identification of the structure, or structures, in the specification that perform the recited function." Ishida, 221 F.3d at 1316. "Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claim limitations." Asyst Technologies, Inc. v. Empak, Inc., 268 F3d. 1364, 1370 (Fed. Cir. 2001) (citations omitted).

Section 112, para. 6 "does not . . . expand the scope of the claim. An element of a claim described as a means for performing a function, if read literally, would encompass any means for performing the function . . . . But section 112 ¶ 6 operates to *cut back* on the types of *means* which could literally satisfy the claim language." Johnson v. Ivac Corp., 885 F.2d 1574, 1580 (Fed. Cir. 1989).

The function identified in claim 12 is a "means for releasably securing the flexible enclosure to the person's leg."

The specification describes the corresponding structure as follows:

Flexible enclosure has fixedly secured thereto releasable securing means in any conventional manner. For example, releasable securing means may be attached to the fabric material which forms flexible enclosure, as by sewing or gluing releasable securing means to flexible enclosure. Releasable securing means includes at least one strap member secured to flexible enclosure.

Patent, col. 6, lines 24-32 (internal references to illustration legend omitted). Alternatively, "three strap members" can be

"spaced along periphery surface of pad structure." Patent, col. 6, lines 32-34.

The specification states that the "strap members can be readily secured to, and released from, the lower leg of the wearer of pad structure. Alternatively, pad structure could be releasably secured to the upper leg, or thigh, of the wearer." Patent, col. 6, lines 42-45. The specification also provides, "Preferably, each strap member is formed in two parts, one part having a hook-like material disposed at its end which engages with an eye-like material disposed at the end of the other part of strap member." Patent, col. 6, lines 37-41.

The claim language, specification, and prosecution history do not determine the ordinary and customary meaning of "fixedly" or "secured," and the Court will consult a dictionary. The definition of "fixed," of which *fixedly* is the adverb form, is: "fastened, attached, or placed so as to be firm and not readily movable." Random House College Dictionary (1973). The adjective form of "secure" is: "not liable to fail, yield, become displaced, etc., as a support or a fastening." Id.

The Court finds that the specification language "enclosure has fixedly secured thereto releasable securing means" requires the strap or straps to originate from the pad enclosure and does not extend to straps which originate from a shin guard.

Another part of the specification, however, could encompass straps originating from a shin guard. The specification closes with the following:

It is to be understood that the invention is not limited to the exact details of construction, operation, exact materials or embodiments shown and described, as obvious modifications and equivalents will be apparent to one skilled in the art; for example, the pad structure could be incorporated as an integral part of a baseball catcher's shin guard, or could be clipped or strapped onto a baseball catcher's shin guard.

Patent, col. 6, lines 58-65. If the pad structure were clipped or strapped onto a shin guard, it would still perform the function of securing the pad enclosure to the wearer's leg. The Court finds that the specification language, "clipping or strapping the pad structure" to a shin guard is an alternative structure that would perform the function of releasably securing the pad to the wearer's leg. The phrase "clipped or strapped onto" a shin guard is broad enough to encompass a strap originating from a shin guard that could be attached to the pad structure.

### **III. Conclusion**

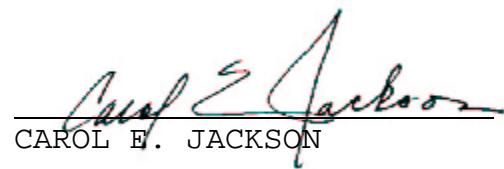
For the reasons discussed above, the Court will interpret the language of claim 12 with reference to the enclosure in a filled state, rather than an empty one. The Court further construes claim 12 as follows:

- (1) The phrase "generally polyhedron shaped" means that the overall shape of the enclosure, when in a substantially filled state, must be that of a polyhedron, and the faces of the polyhedron need

not be strictly or perfectly flat or planar, but must be generally flat or planar.

- (2) The phrase "substantially quadrilaterally shaped" means that the enclosure along its major longitudinal axis has an overall quadrilateral shape with four sides which are overall flat or level and are composed of overall straight lines, and the shape's internal angles reach the sum of approximately 360 degrees.
- (3) The phrase "having four periphery surfaces" means that the pad enclosure has four periphery surfaces which meet, but not necessarily at corners, and if at corners, those corners need not be of any particular angle.
- (4) The phrase "a third periphery surface adapted to be disposed adjacent and spaced from the back of the knee of the person" allows, but does not require, the third periphery surface to be perpendicular to the major longitudinal axis. The phrase precludes a pad enclosure in the shape of a true triangle with an apex facing the back of the knee, but allows for a pad enclosure with two substantially quadrilaterally shaped sides and four periphery surfaces, where the third periphery surface is very narrow. The pad enclosure need not touch the knee.
- (5) The phrase "means for releasably securing the flexible enclosure to the person's leg" means a strap or straps that originate from the pad enclosure or that originate from a shin guard;

regardless of the origination point, the strap(s) must perform the function of securing the enclosure to the wearer's leg.



Carol E. Jackson  
CAROL E. JACKSON  
UNITED STATES DISTRICT JUDGE

Dated this 24th day of May, 2007.